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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,456

08/31/2006

Rudolf Berger

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EXAMINER

YABUT, DANIEL D

ART UNIT

PAPER NUMBER

3656

NOTIFICATION DATE

DELIVERY MODE

01/14/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@boylefred.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,456	<b>Applicant(s)</b> BERGER ET AL.	
	<b>Examiner</b> DANIEL YABUT	<b>Art Unit</b> 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-3, 5-19** are rejected under 35 U.S.C. 102(b) as being anticipated by Yeakley, US Patent 1,335,310.

Yeakley discloses a wobble drive (Fig. 1) comprising a(n):

*Re claim 1*

- Shaft (23)
- Pivot bearing (at 23', 58, 68) that is situated on the shaft and that is inclined in relation to an axis of rotation of the shaft (Fig. 1)
- Wobble finger (62, 64) that extends away from the axis of rotation of the shaft and is held by the pivot bearing
- At least one balance mass is provided on the pivot bearing (73, 74), spaced from the wobble finger, and spaced from a position on the pivot bearing that is radially across from the wobble finger the at least one balance mass and the wobble finger tilting back and forth as the shaft rotates with respect thereto (pg. 3 / L12-22),.

*Re claim 2*

- Balance mass is situated on the shaft in such a way that it counteracts the imbalance resulting from the design of the wobble drive (pg. 5 / L70-76).

*Re claim 3*

- Pivot bearing has an inner ring (near 58') fashioned on the shaft having an annular inner running surface for roller elements (59), the inner running surface being situated in a plane that does not stand perpendicular to the axis of rotation of the shaft (pg. 2 / L91-108).

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- Wobble ring (at 58, 68), situated around the inner ring, is allocated to the pivot bearing, said wobble ring having an outer running surface for the roller elements that is allocated to the inner running surface (near 59) and in that the wobble finger extends from the wobble ring radially to a center axis of the wobble ring (at 62).

*Re claim 5*

- Shaft being mounted at least two bearing points (at 29, 34)
- Balance mass is allocated to at least one of the bearing points (30, 38')

*Re claim 6*

- Shaft being mounted at two bearing points (at 29, 34)
- Balance mass is allocated to each of the bearing points (30, 38')

*Re claim 7*

- Bearing point and the balance mass are adjacent such that an axial distance therebetween allocated thereto is minimal (pg. 2 / L49-50, L65-70)

*Re claim 8*

- Balance masses allocated to the two bearing points are situated opposite one another in relation to the axis of rotation of the shaft (pg. 2/ L65-70; Fig. 1)

*Re claim 9*

- Wobble ring being essentially rotationally symmetrical (Fig. 2), with the exception of the area from which the wobble finger extends (Fig. 2).

*Re claim 10*

- Shaft (23)
- Pivot bearing (at 23', 58, 68) that is situated on the shaft and that is inclined in relation to an axis of rotation of the shaft (Fig. 1)
- Wobble ring (at 58, 68) held by the pivot bearing so that the shaft is rotatable with respect to the wobble ring (pg. 2 / L100-103)

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- Wobble finger (62) that, at a linkage point (at 63), extends from the wobble ring radially to a center axis of the wobble ring (Fig. 1)
- At least one balance mass is provided on the wobble ring in an area that is situated neither at the linkage point nor opposite the linkage point, in relation to the center axis of the wobble ring (73, 74)

*Re claim 11*

- Pivot bearing has an inner ring (near 58') fashioned on the shaft having an annular inner running surface for roller elements (59), the inner running surface being situated in a plane that does not stand perpendicular to the axis of rotation of the shaft (pg. 2 / L91-108).
- Wobble ring (at 58, 68) is allocated to the inner ring, and has an annular outer running surface, allocated to the inner running surface, for the roller elements (near 59).

*Re claim 12*

- Two balance masses (73, 74) are provided that are situated opposite one another on the wobble ring, in relation to the center axis of the wobble ring (pg. 3 / L12-22).

*Re claim 13*

- Two balance masses (73, 74) are provided, and wherein the linkage point stands at the same angular distance to the two balance masses, in relation to the center axis of the wobble ring (pg. 3 / L12-22).

*Re claim 14*

- One balance mass is situated in an area of the wobble ring that is offset by +90° relative to the linkage point of the wobble finger, in relation to the center axis of the wobble ring, and wherein the other balance mass is situated in an area of the wobble ring that is offset by -90° relative to the linkage point of the wobble finger, in relation to the center axis of the wobble ring (pg. 3 / L12-22).

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*Re claim 15*

- Wobble ring is essentially rotationally symmetrical (Fig. 2), with the exception of the linkage point from which the wobble finger extends (Fig. 2) and the areas in which the balance masses (at 73, 74; Fig. 2) are provided.

*Re claim 17*

- Shaft (23)
- Pivot bearing (at 23', 58, 68) including a wobble ring that is situated on the shaft and is inclined in relation thereto, the shaft being rotatable with respect to the wobble ring (pg. 2 / L100-103)
- Wobble finger (62) that, at a linkage point (at 63), extends from the wobble ring radially to a center axis of the wobble ring (Fig. 1), that extends away from the axis of rotation of the shaft, and that is held by the pivot bearing (at 63)
- At least one balance mass is fashioned on the shaft (73, 74), and wherein at least one additional balance mass is provided on the wobble ring in an area that is situated neither at the linkage point nor opposite the linkage point, in relation to the center axis of the wobble ring (pg. 3 / L12-22).

*Re claim 18*

- Balance mass being formed from a plurality of balance mass elements (73, 74).

*Re claim 19*

- Shaft (23)
- Pivot bearing (at 23', 58, 68) including, a bearing inner ring (near 58') that is inclined in relation to and rotates in unison with the shaft (pg. 2 / L91-108).
- Wobble ring (at 58, 68) that concentrically surrounds and is supported by the bearing inner ring the bearing inner ring rotating with respect to the wobble ring and correspondingly tilting the wobble ring back and forth (pg. 2 / L91-108).
- Wobble finger (62) that extends radially from the wobble ring and that tilts back and forth in unison with the wobble ring (at 63), the wobble finger maintaining essentially an unchanged

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orientation transversely with respect to the shaft while tilting back and forth longitudinally along the shaft (pg. 2 / L12-16).

- At least one balance mass (73, 74) that is provided on the wobble ring and that is spaced from the wobble finger.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 4 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeakley, US Patent 1,335,310, in view of Cureton et al, US Patent 4,688,439.

Yeakley discloses all of the claim limitations, see above, but does **not** expressly disclose the balance mass being capable of being manufactured by removing material from the shaft.

Cureton et al. teaches the possibility of creating a balancing couple without the use of additional weights and suggests that an appropriate component could be manufactured to have symmetrical and sufficiently large dimensions that can produce an opposing couple of sufficient magnitude for the purpose of space optimization (see column 4, lines 51-56).

In view of this notion particularly, it would have been obvious to one having ordinary skill in the art at the time of the invention for the balance mass to be capable of being manufactured by removing material from the shaft, as taught by Cureton et al., in the device of Yeakley for the purpose of space optimization.

***Response to Arguments***

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL YABUT whose telephone number is (571)270-5526. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:00 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard W. Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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/DANIEL YABUT/  
Examiner, Art Unit 3656  
1/6/2008

/Richard WL Ridley/  
Supervisory Patent Examiner, Art Unit 3656